



AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

(Currently Amended) A measurement method for measuring a physical value,
2 comprising
3 during a clock cycle: forming an input signal, a reference signal and an offset signal, the
4 input signal including a parasitic value and a useful measurement value, the
5 signals being respectively associated with an input element, a reference element
6 and a parasitic element, all these elements being coupled and having a common
7 driving signal of the same value, the parasitic value depending on the common
8 driving signal, and
9 deriving a relationship between the input signal, from which the parasitic value has been
10 cancelled out, and the reference signal, and
11 from this relationship, determining a value relating to the physical value.

1 2.- (Original) A measurement method according to claim 1, wherein the input signal is a
2 first voltage.

1 3.- (Original) A measurement method according to claim 2, wherein the first voltage is
2 obtained from a direct voltage drop over the sensing element.

1 4.- (Original) A measurement method according to claim 1, wherein the reference signal is a
2 second voltage.

1 5.- (Original) A measurement method according to claim 2, wherein the reference signal is a
2 second voltage.

1 6.- (Original) A measurement method according to claim 4, wherein the second voltage is
2 obtained from a direct voltage drop over the reference element.

- 1 7.- (Original) A measurement method according to claim 1, wherein the reference element is
- 2 a reference resistor.

- 1 8.- (Original) A measurement method according to claim 1, wherein the offset signal is a
- 2 third voltage.

- 1 9.- (Original) A measurement method according to claim 2, wherein the offset signal is a
- 2 third voltage.

- 1 10.- (Original) A measurement method according to claim 4, wherein the offset signal is a
- 2 third voltage.

- 1 11.- (Original) A measurement method according to claim 8, wherein the third voltage is
- 2 obtained from a direct voltage drop over the parasitic element.

- 1 12.- (Original) A measurement method according to claim 1, wherein the physical value
- 2 includes any of temperature, a pressure, a light intensity, a position.

1 13.- (Currently Amended) A measurement system for indirect measurement of a physical
2 value, comprising
3 an analog-to-digital converter with at least a first, a second and a third port, each of the at
4 least three ports being suitable for receiving an input signal from an element, the
5 analog-to-digital converter being suitable for evaluating the physical value in one
6 measurement cycle,
7 a sensing element having a pre-defined characteristic parameter related to the physical
8 value to be measured, being coupled to the first port for applying an input signal
9 to said first port,
10 a reference element being coupled to the second port for applying a reference signal to
11 the second port,
12 an element corresponding to a parasitic value of the sensing element, being coupled to the
13 third port for applying a parasitic value of the sensing element to the third port,
14 the element being coupled with the sensing element and the reference element
15 and having a common driving signal of the same value,
16 means for deriving a relationship between the input signal, from which the parasitic value
17 of sensing element has been cancelled out, and the reference signal, and
18 means for deriving, from the relationship, a value relating to the physical value.

1 14.- (Original) A measurement system according to claim 13, wherein the reference element
2 is coupled in series with the sensing element.

1 15.- (Original) A measurement system according to claim 13, wherein the element
2 corresponding to a parasitic value of the sensing element is coupled in series with the
3 sensing element.

1 16.- (Original) A measurement system according to claim 14, wherein the element
2 corresponding to a parasitic value of the sensing element is coupled in series with the
3 sensing element.

1 17.- (Original) A measurement system according to claim 13, wherein the reference element
2 comprises a reference resistor.

1 18.- (Original) A measurement system according to claim 13, wherein the physical value is
2 any of a temperature, a pressure, a light intensity, a position.